OIPE

RAW SEQUENCE LISTING   DATE: 11/21/2001
PATENT APPLICATION: US/09/987,899   TIME: 10:09:42

Input Set : **F:\sequence listing for 16517.258.txt**
Output Set: **N:\CRF3\11212001\I987899.raw**

ENTERED

```
 2 <110> APPLICANT: Cheikh, Nordine
 3        Liu, Jingdong
 4        Miller, Phillip W.
 5        O Connell, Keith M.
 7 <120> TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated
 8        With the Carbon Assimilation Pathway
10 <130> FILE REFERENCE: 16517.258
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/987,899
C--> 12 <141> CURRENT FILING DATE: 2001-11-16
12 <150> PRIOR APPLICATION NUMBER: US 09/262,979
13 <151> PRIOR FILING DATE: 1999-03-04
15 <150> PRIOR APPLICATION NUMBER: US 60/076,712
16 <151> PRIOR FILING DATE: 1998-03-06
18 <160> NUMBER OF SEQ ID NOS: 7341
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 67
22 <212> TYPE: DNA
23 <213> ORGANISM: Zea mays
25 <220> FEATURE:
26 <221> NAME/KEY: unsure
27 <222> LOCATION: (1)...(67)
28 <223> OTHER INFORMATION: unsure at all n locations
30 <220> FEATURE:
31 <223> OTHER INFORMATION: Clone ID: 700430856H1
33 <400> SEQUENCE: 1
W--> 35 cgacaccgtg ttaagttaat atataactgg tgcttttat ttaanaaann naanaaaaan    60
37 aaaaaaa                                                              67
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41 <211> LENGTH: 142
42 <212> TYPE: DNA
43 <213> ORGANISM: Zea mays
45 <220> FEATURE:
46 <223> OTHER INFORMATION: Clone ID: 700433144H1
48 <400> SEQUENCE: 2
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52 gtgaatgcaa gctccggcta tcatatacat gtaatatgga tacaaactat atatataaat   120
54 ccgccgaggc gccgacaata ct                                            142
57 <210> SEQ ID NO: 3
58 <211> LENGTH: 142
59 <212> TYPE: DNA
60 <213> ORGANISM: Zea mays
62 <220> FEATURE:
63 <223> OTHER INFORMATION: Clone ID: 700433148H1
65 <400> SEQUENCE: 3
67 ctctatacct gctgctacaa aactactgca acgcctatat atacttgggg tgaggaacat    60
69 gtgaatgcaa gctccggcta tcatatacat gtaatatgga tacaaactat atatataaat   120
71 ccgccgaggc gccgacaata ct                                            142
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Input Set : **F:\sequence listing for 16517.258.txt**
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74 <210> SEQ ID NO: 4
75 <211> LENGTH: 319
76 <212> TYPE: DNA
77 <213> ORGANISM: Zea mays
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Clone ID: 700098783H1
82 <400> SEQUENCE: 4
84 gcaagcagcg agtacataca tactaggcag ccaggcagcc atggcgccca ccgtgatgat    60
86 ggcctcgtcg gccaccgccg tcgctccgtt ccaggggctc aagtccaccg ccagcctccc   120
88 cgtcgcccgc cgctcctcca gaagcctcgg caacgtcagc aacggcggaa ggatccggtg   180
90 catgcaggtg tggccggcct acggcaacaa gaagttcgag acgctgtcgt acctgacgcc   240
92 gctgtcgacg gacgacctgc tgaagcaggt ggactacctg ctgcgcaacg gctggatacc   300
94 ctgcctcgag ttcagcaag                                                 319
97 <210> SEQ ID NO: 5
98 <211> LENGTH: 323
99 <212> TYPE: DNA
100 <213> ORGANISM: Zea mays
102 <220> FEATURE:
103 <223> OTHER INFORMATION: Clone ID: 700097213H1
105 <400> SEQUENCE: 5
107 cgacctgctg aagcaggtgg actacctgct gcgcaacggc tggataccct gcctcgagtt    60
109 cagcaaggtc ggcttcgtgt accgcgagaa ctccacctcc ccgtgctact acgacggccg   120
111 ctactggacc atgtggaagc atgcccatgt tcggctgcaa cgacgccacc caggtgtaca   180
113 aggagctgca ggaggccatc aaatcctacc cggacgcctt ccaccgcgtc atcggcttcg   240
115 acaacatcaa gcagacgcag tgcgtcagct tcatcgccta caagcccccg ggcagcgact   300
117 agaccgcgcc cgccggccgc ccc                                           323
120 <210> SEQ ID NO: 6
121 <211> LENGTH: 330
122 <212> TYPE: DNA
123 <213> ORGANISM: Zea mays
125 <220> FEATURE:
126 <223> OTHER INFORMATION: Clone ID: 700097673H1
128 <400> SEQUENCE: 6
130 gcttgccatg gcgcccaccg tgatgatggc ctcgtcggca accgccgtcg ccccgttcca    60
132 gggtctcaag tccgccgcca gcctccccgt cgcccgccgc agcaccagga gcctcggcaa   120
134 cgtcagcaac ggcggaagga tccggtgcat gcaggtgtgg ccggcctacg gcaacaagaa   180
136 gttcgagacg ctgtcgtacc tgccgccgct gtcgacggac gacctgctga agcaggtgga   240
138 ctacctgctg cgcaacggct ggataccctg cctcgagttc agcaagctcg ggttcgtgta   300
140 ccgcgagaac tccacctccc cgtgctacta                                    330
143 <210> SEQ ID NO: 7
144 <211> LENGTH: 310
145 <212> TYPE: DNA
146 <213> ORGANISM: Zea mays
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Clone ID: 700101767H1
151 <400> SEQUENCE: 7
153 agcaagcaag ctcgatctac tactactact agctggtaca catactagcc agcctgccag    60
155 ccagcttgcc atggcgccca ccgtgatgat ggcctcgtcg gcaaccgccg tcgccccgtt   120
157 ccagggtctc aagtccgccg ccagcctccc cgtcgcccgc cgcagcacca ggagcctcgg   180
```

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```
159 caacgtcagc aacggcggaa ggatccggtg catgcaggtg tggccggcct acggcaacaa   240
161 gaagttcgag acgctgtcgt acctgccgcc gctgtcgacg gacgacctgc tgaagcaggt   300
163 ggactacctg                                                          310
166 <210> SEQ ID NO: 8
167 <211> LENGTH: 318
168 <212> TYPE: DNA
169 <213> ORGANISM: Zea mays
171 <220> FEATURE:
172 <223> OTHER INFORMATION: Clone ID: 700100001H1
174 <400> SEQUENCE: 8
176 gtcgcccgcc gcagcaccag gagcctcggc aacgtcagca acggcggaag gatccggtgc   60
178 atgcaggtgt ggccggccta cggcaacaag aagttcgaga cgctgtcgta cctgccgccg   120
180 ctgtcgacgg acgacctgct gaagcaggtg gactacctgc tgcgcaacgg ctggataccc   180
182 tgcctcgagt tcagcaagct cgggttcgtg taccgcgaga actccacctc cccgtgctac   240
184 tacgacggcc gctactggac catgtggaag ctgcccatgt tcggctgcac cgacgccacg   300
186 caagtgtaca aggagctg                                                 318
189 <210> SEQ ID NO: 9
190 <211> LENGTH: 316
191 <212> TYPE: DNA
192 <213> ORGANISM: Zea mays
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Clone ID: 700097382H1
197 <400> SEQUENCE: 9
199 agcaagcaag cagcgagtac atacatacta ggcagccagg cagccatggc gcccaccgtg   60
201 atgatggcct cgtcggccac cgccgtcgct ccgttccagg ggctcaagtc caccgccagc   120
203 ctccccatcg cccgccgctc ctccagaagc ctcggcaacg tcagcaacgg cggaaggatc   180
205 cggtgcatgc aggtgtggcc ggcctacggc aacaagaagt cgagacgct gtcgtacctg   240
207 ccgccgctgt cgacggacga cctgctgaag caggtggact acctgctgcg caacggctgg   300
209 ataccctgcc tcgagt                                                   316
212 <210> SEQ ID NO: 10
213 <211> LENGTH: 317
214 <212> TYPE: DNA
215 <213> ORGANISM: Zea mays
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Clone ID: 700099925H1
220 <400> SEQUENCE: 10
222 agcaagcaag caagcagcga gtacatacat actaggcagc caggcagcca tggcgcccac   60
224 cgtgatgatg gcctcgtcgg ccaccgccgt cgctccgttc caggggctca agtccaccgc   120
226 cagcctcccc gtcgcccgcc gctcctccag aagcctcggc aacgtcagca acggcggaag   180
228 gatccggtgc atgcaggtgt ggccggccta cggcaacaag aagttcgaga cgctgtcgta   240
230 cctgccgccg ctgtcgacgg acgacctgct gaagcaggtg gactacctgc tgcgcaacgg   300
232 ctggataccc tgcctcg                                                  317
235 <210> SEQ ID NO: 11
236 <211> LENGTH: 315
237 <212> TYPE: DNA
238 <213> ORGANISM: Zea mays
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Clone ID: 700098235H1
243 <400> SEQUENCE: 11
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245 caagcaagca agcagcgagt acatacatac taggcagcca ggcagccatg gcgcccaccg    60
247 tgatgatggc ctcgtcggcc accgccgtcg ctccgttcca ggggctcaag tccaccgcca   120
249 gcctccccgt cgcccgccgc tcctccagaa gcctcggcaa cgtcagcaac ggcggaagga   180
251 tccggtgcat gcaggtgtgg ccggcctacg gcaacaagaa gttcgagacg ctgtcgtacc   240
253 tgccgccgct gtcgacggac gacctgctga agcaggtgga ctacctgctg cgcaacggct   300
255 ggataccctg cctcg                                                    315
258 <210> SEQ ID NO: 12
259 <211> LENGTH: 302
260 <212> TYPE: DNA
261 <213> ORGANISM: Zea mays
263 <220> FEATURE:
264 <223> OTHER INFORMATION: Clone ID: 700093043H1
266 <400> SEQUENCE: 12
268 gcaagctcga tctactacta ctactagctg gtacacatac tagccagcct gccagccagc    60
270 ttgccatggc gcccaccgtg atgatggcct cgtcggcaac cgccgtcgcc ccgttccagg   120
272 gtctcaagtc cgccgccagc ctccccgtcg cccgccgcag caccaggagc ctcggcaacg   180
274 tcagcaacgg cggaaggatc cggtgcatgc aggtgtggcc ggcctacggc aacaagaagt   240
276 tcgagacgct gtcgtacctg ccgccgctgt cgacggacga cctgctgaag caggtggact   300
278 ac                                                                  302
281 <210> SEQ ID NO: 13
282 <211> LENGTH: 315
283 <212> TYPE: DNA
284 <213> ORGANISM: Zea mays
286 <220> FEATURE:
287 <223> OTHER INFORMATION: Clone ID: 700089802H1
289 <400> SEQUENCE: 13
291 agcaagcaag cagcgagtac atacatacta ggcagccagg cagccatggc gcccaccgtg    60
293 atgatggcct cgtcggccac cgccgtcgct ccgttccagg ggctcaagtc cacgccagcc   120
295 tccccgtcgc cgccgctcc tccagaagcc tcggcaacgt cagcaacggc ggaaggatcc   180
297 ggtgcatgca ggtgtggccg gcctacggca acaagaagtt cgagacgctg tcgtacctgc   240
299 cgccgctgtc gacggacgac ctgctgaagc aggtggacta cctgctgcgc aacggctgga   300
301 taccctgcct cgagt                                                    315
304 <210> SEQ ID NO: 14
305 <211> LENGTH: 297
306 <212> TYPE: DNA
307 <213> ORGANISM: Zea mays
309 <220> FEATURE:
310 <223> OTHER INFORMATION: Clone ID: 700101196H1
312 <400> SEQUENCE: 14
314 gccaggcagc catggcgccc accgtgatga tggcctcgtc ggccaccgcc gtcgctccgt    60
316 tccaggggct caagtccacc gccagcctcc ccgtcgcccg ccgctcctcc agaagcctcg   120
318 gcaacgtcag caacggcgga aggatccggt gcatgcaggt gtggccggcc tacggcaaca   180
320 agaagttcga gacgctgtcg tacctgccgc cgctgtcgac ggacgacctg ctgaagcagg   240
322 tggactacct gctgcgcaac ggctggatac cctgcctcga gttcagcaag gtcggct     297
325 <210> SEQ ID NO: 15
326 <211> LENGTH: 309
327 <212> TYPE: DNA
328 <213> ORGANISM: Zea mays
330 <220> FEATURE:
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Input Set : **F:\sequence listing for 16517.258.txt**
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331 <223> OTHER INFORMATION: Clone ID: 700097309H1
333 <400> SEQUENCE: 15
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337 tgatgatggc ctcgtcggcc accgccgtcg ctccgttcca ggggctcaag tccaccgcca   120
339 gcctccccgt cgcccgccgc tcctccagaa gcctcggcaa cgtcagcaac ggcggaagga   180
341 tccggtgcat gcaggtgtgg ccggcctacg gcaacaagaa gttcgagacg ctgtcgtacc   240
343 tgccgccgct gtcgacggac gacctgctga agcaggtgga ctacctgctg cgcaacggct   300
345 ggataccct                                                          309
348 <210> SEQ ID NO: 16
349 <211> LENGTH: 305
350 <212> TYPE: DNA
351 <213> ORGANISM: Zea mays
353 <220> FEATURE:
354 <223> OTHER INFORMATION: Clone ID: 700100270H1
356 <400> SEQUENCE: 16
358 agcaagcagc gagtacatac atactaggca gccaggcagc catggcgccc accgtgatga    60
360 tggcctcgtc ggccaccgcc gtcgctccgt tccaggggct caagtccacc gccagcctcc   120
362 ccgtcgcccg ccgctcctcc agaagcctcg gcaacgtcag caacggcgga aggatccggt   180
364 gcatgcaggt gtggccggcc tacggcaaca agaagttcga gacgctgtcg tacctgccgc   240
366 cgctgtcgac ggacgacctg ctgaagcagg tggactacct gctgcgcaac ggctggatac   300
368 cctgc                                                              305
371 <210> SEQ ID NO: 17
372 <211> LENGTH: 312
373 <212> TYPE: DNA
374 <213> ORGANISM: Zea mays
376 <220> FEATURE:
377 <223> OTHER INFORMATION: Clone ID: 700208152H1
379 <400> SEQUENCE: 17
381 caacgcgtcc gggacctggg caagcaagct cgatctacta ctactactag ctggtacaca    60
383 tactagccag cctgccagcc agcttgccat ggcgcccacc gtgatgatgg cctcgtcggc   120
385 aaccgccgtc gccccgttcc agggtctcaa gtccgccgcc agcctccccg tcgcccgccg   180
387 cagcaccagg agcctcggca acgtcagcaa cggcggaagg atccggtgca tgcaggtgtg   240
389 gccggcctac ggcaacaaga agttcgagac gctgtcgtac ctgccgccgc tgtcgacgga   300
391 cgacctgctg aa                                                      312
394 <210> SEQ ID NO: 18
395 <211> LENGTH: 322
396 <212> TYPE: DNA
397 <213> ORGANISM: Zea mays
399 <220> FEATURE:
400 <221> NAME/KEY: unsure
401 <222> LOCATION: (1)...(322)
402 <223> OTHER INFORMATION: unsure at all n locations
404 <220> FEATURE:
405 <223> OTHER INFORMATION: Clone ID: 700215709H1
407 <400> SEQUENCE: 18
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411 agccagcttg ccatggcgcc caccgtgatg atggcctcgt cggcaaccgc cgtcgccccg   120
413 ttccagggtc tcaagtccgc cgccagcctc cccgtcgccc gccgcagcac caggagcctc   180
415 ggcaacgtca gcaacggcgg aaggatccgg tgcatgcagg tgtggccggc ctacggcaac   240
```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: **US/09/987,899**

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Input Set : **F:\sequence listing for 16517.258.txt**
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```
L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:35 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1494 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:1498 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:2159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100
L:2204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:2206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:2208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:2329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108
L:2391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
L:2395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
L:2609 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2611 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2613 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2615 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:126
L:2747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:128
L:2831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2835 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2837 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2839 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2863 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2865 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2867 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2875 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2893 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133
L:2969 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:136
L:3016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3018 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3022 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3026 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3028 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3048 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3052 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
```

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L:3054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3056 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3058 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3060 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139